

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008767**Date Inspected:** 29-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Xu Xian Ping			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	OBG & TOWER Components		

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

**BAY 1**

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #012 located on Floor Beam FB204 – 047. Welder is identified as 216575. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – Tc – U4b – F.

FCAW process welding of weld joint #006 located on Floor Beam FB205 – 045. Welder is identified as 216575. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – Tc – U4b – F.

**BAY 2****Ultrasonic Testing**

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG Component. The weld designations reviewed are as follows:

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

---

1. FB3031 – 001 – 078~081; 101; 108
2. FB3081 – 001 – 078~081; 101; 108
3. FB3054 – 001 – 078~081; 101; 108

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #084 located on Floor Beam FB3065 – 002. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #059 located on Floor Beam FB3065 – 003. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #062 located on Floor Beam FB3065 – 002. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #077 located on Floor Beam FB3065 – 003. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #122 located on Floor Beam FB3081 – 001. Welder is identified as 206358. ZPMC QC is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F – 1.

### BAY 3

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. FB204 – 010 – 099 – Green Tag # 009996
2. FB024 – 011 – 149; 118; 073; 070; 104; 084; 098; 109; 083; 102; 134; 143 – Green Tag # 009995

This QA Inspector observed the following work in progress:

SAW process welding of a repair weld joint #001 located on CB202E – 014. Welder is identified as 058100. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – 345 – SAW – 1G – Repair.

### BAY 5

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 4 )

---

TR4A – PP09 – 001; 002 – Green Tag # 009782

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #003 located on Traveler Rail TR10A – 002. Welder is identified as 215689.

ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

FCAW process welding of weld joint #003 located on Traveler Rail TR10C – 006. Welder is identified as 215689.

ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

### BAY 6

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows:

#### TOWER CROSS PLATE

WD1 – CBSA3 – 2 – 001~004 – Green Tag # 005868

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #7A located on WD1 – A305 – 65M – 1. Welder is identified as 066481.

ZPMC QC is identified as Zhang Bao Bo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

SMAW process welding of weld joint #9B located on WD1 – A305 – 77M – 4. Welder is identified as 068617.

ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

SMAW process welding of weld joint #1B located on WD1 – A305 – 65M – 1. Welder is identified as 067707.

ZPMC QC is identified as Zhang Bao Bo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

SMAW process welding of weld joint #9B located on WD1 – A305 – 77M – 2. Welder is identified as 049769.

ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

### BAY 7

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #002 located on Deck Plate DP3034 – 017. Welder is identified as 222396.

ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #004 located on Deck Plate DP3038 – 017. Welder is identified as 051246.

---

## WELDING INSPECTION REPORT

( Continued Page 4 of 4 )

---

ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
<b>Reviewed By:</b>	Prue,Erik	QA Reviewer

---